

REMARKS

Applicant respectfully requests reconsideration and allowance of the present application in view of the foregoing amendments and the following remarks.

Claims 1-52 are pending in the application, with claims 1, 17, 27 and 37 being independent. Claims 1, 10-11, 17, 21, 27, 31, 37 and 41 are amended herein. No claims are canceled or withdrawn.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-10, 13-15, 17-20, 22-30, 32-34, 37, 39-40, 42-44 and 46-52 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Dixon et al. (U.S. Patent No. 6,975,752). Applicant respectfully traverses the rejection, and respectfully requests that the rejection be reconsidered and withdrawn.

Independent claim 1 recites, among other things, caching a reconstructed frame, receiving a request to scrub to a predictive frame, and decoding the predictive frame starting with the reconstructed frame.

Dixon, on the other hand, does not disclose caching a reconstructed frame, receiving a request to scrub to a predictive frame, and decoding the predictive frame starting with the reconstructed frame. Instead, Dixon discloses a system 100 for acquiring radioscopic x-ray images and communicating the acquired radioscopic x-ray images to a computer 114 (*see FIG. 1 and col. 1, lines 12-17 and col. 5, line 60 – col. 6, line 31 of Dixon*). Each acquired radioscopic x-ray image is formed completely from a single x-ray exposure 104, and is independent from every other acquired radioscopic x-ray image (*see FIG. 1 and col. 6, lines 5-31 of Dixon*).

However, contrary to the independent x-ray images in Dixon, a predictive frame is part of a group of pictures (GOP) that begins with an initial I-frame and includes the subsequent predictive frames that depend from the I-frame. Furthermore, a reconstructed frame is a decoded frame that requires decoding a corresponding I-frame as well as any subsequent intervening frames within the corresponding GOP. As a result, Dixon fails to disclose or even suggest either a predictive frame or a reconstructed frame, as presently claimed, because each acquired radioscopic x-ray image in Dixon is formed from a separate x-ray exposure and is independent from every other acquired radioscopic x-ray image. In no way is the acquired radioscopic x-ray image in Dixon a part of a GOP that begins with an I-frame, nor is the acquired radioscopic x-ray image decoded or reconstructed from any other acquired radioscopic x-ray image. The independent x-ray images in Dixon simply cannot be used to decode or reconstruct other independent x-ray images. There is absolutely no mention in Dixon of any kind of GOP, I-frame, predictive frame, or reconstructed frame as described in detail throughout the present application.

In addition, the “data reordering” disclosed in Dixon is specific to direct memory access between the display video memory and the CPU operations, and allows the correct display to provide the correct image simply by reading the display video memory in order (*see FIG. 27 and col. 26, lines 23-35 of Dixon*). However, this “reordering” is not reconstructing, and at no point is the data of one frame ever used to decode or reconstruct the data of another frame. Again, there is absolutely no mention in Dixon of any kind of GOP, I-frame, predictive frame, or reconstructed frame as described in detail throughout the present application.

Therefore, Dixon fails to disclose or suggest all of the features of claim 1. Accordingly, claim 1 is distinguishable over Dixon.

Dependent claims 2-10 and 13-15 depend from claim 1 and are distinguishable over Dixon by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Independent claim 17 recites, among other things, caching a reconstructed frame, receiving a request to scrub to a predictive frame, and decoding the predictive frame starting with the reconstructed frame.

Dixon, on the other hand, does not disclose caching a reconstructed frame, receiving a request to scrub to a predictive frame, and decoding the predictive frame starting with the reconstructed frame. As discussed above in support of claim 1, Dixon discloses a system 100 for acquiring radioscopy x-ray images and communicating the acquired radioscopy x-ray images to a computer 114 (*see FIG. 1 and col. 1, lines 12-17 and col. 5, line 60 – col. 6, line 31 of Dixon*). Each acquired radioscopy x-ray image is formed completely from a single x-ray exposure 104, and is independent from every other acquired radioscopy x-ray image (*see FIG. 1 and col. 6, lines 5-31 of Dixon*).

However, contrary to the independent x-ray images in Dixon, a predictive frame is part of a GOP that begins with an initial I-frame and includes the subsequent predictive frames that depend from the I-frame. Furthermore, a reconstructed frame is a decoded frame that requires decoding a corresponding I-frame as well as any subsequent intervening frames within the corresponding GOP. As a result, Dixon fails to disclose or even suggest either a predictive frame or a reconstructed frame, as presently claimed, because each acquired radioscopy x-ray image in Dixon is formed from a separate x-ray exposure and is independent from every other acquired radioscopy x-ray image. In no way is the acquired radioscopy x-ray image in Dixon a part of a GOP that begins with an I-frame, nor is the acquired radioscopy x-ray image decoded or reconstructed

from any other acquired radioscopic x-ray image. The independent x-ray images in Dixon simply cannot be used to decode or reconstruct other independent x-ray images. There is absolutely no mention in Dixon of any kind of GOP, I-frame, predictive frame, or reconstructed frame as described in detail throughout the present application.

In addition, the “data reordering” disclosed in Dixon is specific to direct memory access between the display video memory and the CPU operations, and allows the correct display to provide the correct image simply by reading the display video memory in order (*see FIG. 27 and col. 26, lines 23-35 of Dixon*). However, this “reordering” is not reconstructing, and at no point is the data of one frame ever used to decode or reconstruct the data of another frame. Again, there is absolutely no mention in Dixon of any kind of GOP, I-frame, predictive frame, or reconstructed frame as described in detail throughout the present application.

Dependent claims 18-20 and 22-26 depend from claim 17 and are distinguishable over Dixon by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Independent claim 27 recites, among other things, caching a reconstructed frame, receiving a request to scrub to a predictive frame following an intracoded frame within a group of pictures GOP, and decoding the predictive frame starting with the reconstructed frame.

Dixon, on the other hand, does not disclose caching a reconstructed frame, receiving a request to scrub to a predictive frame following an I-frame within a GOP, and decoding the predictive frame starting with the reconstructed frame. As discussed above in support of claim 1, Dixon discloses a system 100 for acquiring radioscopic x-ray images and communicating the acquired radioscopic

x-ray images to a computer 114 (see FIG. 1 and col. 1, lines 12-17 and col. 5, line 60 – col. 6, line 31 of Dixon). Each acquired radioscopic x-ray image is formed completely from a single x-ray exposure 104, and is independent from every other acquired radioscopic x-ray image (see FIG. 1 and col. 6, lines 5-31 of Dixon).

However, contrary to the independent x-ray images in Dixon, a predictive frame is part of a GOP that begins with an initial I-frame and includes the subsequent predictive frames that depend from the I-frame. Furthermore, a reconstructed frame is a decoded frame that requires decoding a corresponding I-frame as well as any subsequent intervening frames within the corresponding GOP. As a result, Dixon fails to disclose or even suggest either a predictive frame or a reconstructed frame, as presently claimed, because each acquired radioscopic x-ray image in Dixon is formed from a separate x-ray exposure and is independent from every other acquired radioscopic x-ray image. In no way is the acquired radioscopic x-ray image in Dixon a part of a GOP that begins with an I-frame, nor is the acquired radioscopic x-ray image decoded or reconstructed from any other acquired radioscopic x-ray image. The independent x-ray images in Dixon simply cannot be used to decode or reconstruct other independent x-ray images. There is absolutely no mention in Dixon of any kind of GOP, I-frame, predictive frame, or reconstructed frame as described in detail throughout the present application.

In addition, the “data reordering” disclosed in Dixon is specific to direct memory access between the display video memory and the CPU operations, and allows the correct display to provide the correct image simply by reading the display video memory in order (see FIG. 27 and col. 26, lines 23-35 of Dixon). However, this “reordering” is not reconstructing, and at no point is the data of one frame ever used to decode or reconstruct the data of another frame. Again, there is absolutely no mention in Dixon of any kind of GOP, I-frame, predictive

frame, or reconstructed frame as described in detail throughout the present application.

Dependent claims 28-30 and 32-34 depend from claim 27 and are distinguishable over Dixon by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Independent claim 37 recites, among other things, means for caching a reconstructed frame, means for receiving a request to scrub to a predictive frame, and means for decoding the predictive frame starting with the reconstructed frame.

Dixon, on the other hand, does not disclose means for caching a reconstructed frame, means for receiving a request to scrub to a predictive frame, and means for decoding the predictive frame starting with the reconstructed frame. As discussed above in support of claim 1, Dixon discloses a system 100 for acquiring radioscopic x-ray images and communicating the acquired radioscopic x-ray images to a computer 114 (*see FIG. 1 and col. 1, lines 12-17 and col. 5, line 60 – col. 6, line 31 of Dixon*). Each acquired radioscopic x-ray image is formed completely from a single x-ray exposure 104, and is independent from every other acquired radioscopic x-ray image (*see FIG. 1 and col. 6, lines 5-31 of Dixon*).

However, contrary to the independent x-ray images in Dixon, a predictive frame is part of a GOP that begins with an initial I-frame and includes the subsequent predictive frames that depend from the I-frame. Furthermore, a reconstructed frame is a decoded frame that requires decoding a corresponding I-frame as well as any subsequent intervening frames within the corresponding GOP. As a result, Dixon fails to disclose or even suggest either a predictive frame or a reconstructed frame, as presently claimed, because each acquired

radioscopic x-ray image in Dixon is formed from a separate x-ray exposure and is independent from every other acquired radioscopic x-ray image. In no way is the acquired radioscopic x-ray image in Dixon a part of a GOP that begins with an I-frame, nor is the acquired radioscopic x-ray image decoded or reconstructed from any other acquired radioscopic x-ray image. The independent x-ray images in Dixon simply cannot be used to decode or reconstruct other independent x-ray images. There is absolutely no mention in Dixon of any kind of GOP, I-frame, predictive frame, or reconstructed frame as described in detail throughout the present application.

In addition, the “data reordering” disclosed in Dixon is specific to direct memory access between the display video memory and the CPU operations, and allows the correct display to provide the correct image simply by reading the display video memory in order (*see FIG. 27 and col. 26, lines 23-35 of Dixon*). However, this “reordering” is not reconstructing, and at no point is the data of one frame ever used to decode or reconstruct the data of another frame. Again, there is absolutely no mention in Dixon of any kind of GOP, I-frame, predictive frame, or reconstructed frame as described in detail throughout the present application.

Dependent claims 39-40, 42-44 and 46-52 depend from claim 37 and are distinguishable over Dixon by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Claim Rejections Under 35 U.S.C. § 103

Claims 11-14, 16, 21, 31, 35-36, 38, 41 and 45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dixon et al. (U.S. Patent No. 6,975,752) in view of Huntington et al. (U.S. Patent App. Pub. No. 2007/0011321).

Applicant respectfully traverses the rejection, and respectfully requests that the rejection be reconsidered and withdrawn.

Dependent claims 11-14, 16, 21, 31, 35-36, 38, 41 and 45 are distinguishable over the proposed combination of references by virtue of their respective dependencies from claims 1, 17, 27 and 37, as well as for additional features that they recite. In addition, there is no motivation to combine the Dixon and Huntington references. Applicant also respectfully requests individual consideration of each dependent claim.

CONCLUSION

All objections and rejections having been addressed, it is respectfully submitted that the present application is now in condition for allowance, and a Notice to that effect is earnestly solicited. However, if there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Respectfully Submitted,
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